Contents

Biotechnology

- G. Amin, H. Verachtert: Comparative Study of Ethanol Production by Immobilized-cell Systems Using Zymomonas mobilis or Saccharomyces bayanus 59
- B. Bisping, H. J. Rehm: Glycerol Production by Immobilized Cells of Saccharomyces cerevisiae 136
- T. A. Clark, R. Chong, I. S. Maddox: The Effect of Dissolved Oxygen Tension on 11β- and 19-Hydroxylation of Reichstein's Substance S by Pellicularia filamentosa 131
- S. Cromie, H. W. Doelle: Limitations in Substrate Utilization Efficiency by Zymomonas mobilis 69
- A. Freeman, T. Blank, Y. Aharonowitz: Protein Determination of Cells Immobilized in Cross-Linked Synthetic Gels 13
- B. Hahn-Hägerdal, B. Mattiasson: Azide Sterilization of Fermentation Media. Ethanol Production from Glucose Using Immobilized Saccharomyces cerevisiae 140
- Å. Haraldson, C.-G. Rosén: Studies on Continuous Ethanol Fermentation of Sugar Cane Molasses. I. A System for Continuous Fermentation 216
- Å. Haraldson, C.-G. Rosén: Studies on Continuous Ethanol Fermentation of Sugar Cane Molasses. II. Continuous Alcohol Fermentation and Product Removal in a Laboratory Scale Plant 220
- J. P. Herman, E. Jakubczak, J. P. Belaich, H. Leclerc: Oxygen Availability for Bacterial Growth with a Flow Microcalorimeter 212
- O. Holst, S.-O. Enfors, B. Mattiasson: Oxygenation of Immobilized Cells Using Hydrogen-Peroxide; A Model Study of Gluconobacter oxydans Converting Glycerol to Dihydroxyacetone 64
- V. Larreta Garde, G. Gellf, D. Thomas: Immobilized Chromatophores – ATP Regeneration in Batch and Open Reactors 232
- T. Okada, I. Karube, S. Suzuki: Hybrid Urea Sensor Using Nitrifying Bacteria 149
- D. J. Salt, R. B. Leslie, P. J. Lillford, P. Dunnill: Factors Influencing Protein Structure During Acid Precipitation: A Study of Soya Proteins 144
- A. Shinmyo, H. Kimura, H. Okada: Physiology of α-Amylase Production by Immobilized Bacillus amyloliquefaciens 7
- F. Vardar, M. D. Lilly: Effect of Cycling Dissolved Oxygen Concentrations on Product Formation in Penicillin Fermentations 203
- K. Yokozeki, S. Yamanaka, T. Utagawa, K. Takinami, Y. Hirose, A. Tanaka, K. Sonomoto, S. Fukui: Production of Adenine Arabinoside by Gel-Entrapped Cells of Enterobacter aerogenes in Water – Organic Cosolvent System 225
- K. Yokozeki, S. Yamanaka, K. Takinami, Y. Hirose, A. Tanaka, K. Sonomoto, S. Fukui: Application of Immobilized Lipase to Regio-Specific Interesterification of Triglyceride in Organic Solvent 1

Industrial Microbiology

- H. Bahl, W. Andersch, K. Braun, G. Gottschalk: Effect of pH and Butyrate Concentration on the Production of Acetone and Butanol by Clostridium acetobutylicum Grown in Continuous Culture 17
- T. W. Barker, J. P. Quinn, R. Marchant: The Use of a Mixed Culture of Geotrichum candidum, Candida krusei, and Hansenula anomala for Microbial Protein Production from Whiskey Distillery Spent Wash 247
- S. de Cabrera, M. C. de Arriola, E. Morales, F. de Micheo, C. Rolz: EX-FERM Ethanol Production Using Chipped Sugarcane in Packed Bed Fermenters 21
- H. W. Doelle: Kinetic Characteristics and Regulatory Mechanisms of Glucokinase and Fructokinase from Zymomonas mobilis 241

- R. Eschenbruch, K. J. Cresswell, B. M. Fisher, R. J. Thornton: Selective Hybridisation of Pure Culture Wine Yeasts. I. Elimination of Undesirable Wine-Making Properties 155
- J. P. Guiraud, J. M. Caillaud, P. Galzy: Optimization of Alcohol Production from Jerusalem Artichokes 81
- K. Jernejc, A. Cimerman, A. Perdih: Citric Acid Production in Chemically Defined Media by Aspergillus niger 29
- H. Kobel, R. Traber: Directed Biosynthesis of Cyclosporins 237
- M. Taniguchi, Y. Kometani, M. Tanaka, R. Matsuno, T. Kamikubo: Production of Single-cell Protein from Enzymatic Hydrolyzate of Rice Straw 74
- R. J. Thornton: Selective Hybridisation of Pure Culture Wine Yeasts. II. Improvement of Fermentation Efficiency and Inheritance of SO₂ Tolerance 159

Environmental Microbiology

- S. P. Antai, D. L. Crawford: Degradation of Extractive-free Lignocelluloses by Coriolus versicolor and Poria placenta 165
- R. Braun, W. Stuparek, J. Meyrath: Factors which influence the Sedimentation Characteristics of *Torulopsis glabrata* After Growth in a Recirculation System 91
- H. Janshekar, T. Haltmeier, C. Brown: Fungal Degradation of Pine and Straw Alkali Lignins 174
- Nilsson, S. Ohlson: Columnar Denitrification of Water by Immobilized Pseudomonas denitrificans Cells 86
- S. P. Peiris, P. A. D. Rickard, N. W. Dunn: Comparison of the Xylanolytic and Cellulolytic Activities of Cellulomonas 169
- H. Seiler, H. Blaim: Population Shifts in Activated Sludge from Sewage Treatment Plants of the Chemical Industry: A Numerical Cluster Analysis 97
- F. Streichsbier, K. Messner, M. Wessely, M. Röhr: The Microbiological Aspects of Grape Marc Humification 182
- T. Takamatsu, S. Shioya, K. Morisaki, D. Ihara: On-Line Monitoring and Control of an Activated Sludge Process for Waste Water Using "MMOUR" 187
- M. Taniguchi, M. Tanaka, R. Matsuno, T. Kamikubo: Evaluation of Chemical Pretreatment for Enzymatic Solubilization of Rice Straw 35

Applied Microbiology

- R. H. Archer, R. Chong, I. S. Maddox: Hydrolysis of Bile Acid Conjugates by *Closteridium bifermentans* 41
- V. Danilov, N. Baranova, A. Ismailov, N. Egorov: The Effect of Camphor on Bacterial Bioluminescence 125
- N. M. Fish, D. J. Allenby, M. D. Lilly: Oxidation of n-Alkanes: Growth of *Pseudomonas putita* 259
- T. Fukumura, M. Takeuchi, I. Banno: Stepwise Loss of Metabolism of ε-Aminocaproic Acid Cyclic Dimer in Alcaligenes Species D-2 120
- R. H. Kwast, C. T. Verrips: Heat Resistance of Salmonella senftenberg 775W at Various Sucrose Concentrations in Distilled Water 193
- Z.-H. Yi, H. J. Rehm: Metabolic Formation of Dodecanedioic Acid by a Mutant of Candida tropicalis 254
- Young Bae Kim, H. J. Rehm: Studies on a Mixed Culture of Candida parapsilosis and Different Bacilli on Alkane. I. Characterization of the Mixed Culture Systems 105
- Young Bae Kim, H. J. Rehm: Studies on a Mixed Culture of Candida parapsilosis and Different Bacilli on Alkane. II. Metabolites of Candida parapsilosis and Their Utilization by Bacillus stearothermophilus 112

Short Communications

- H. Janshekar, A. Fiechter: On the Bacterial Degradation of Lignin 47
- V. Narayan, K. Koteswara Rao: Production of Ergot Alkaloids by Aspergillus fumigatus (Fresenius) 55
- N. Uraih, L. Ogbadu: Influence of Woodsmoke on Aflatoxin Production by Aspergillus flavus 51